

## Properties and the Ontology of Natural Language

Metaphysicians commonly distinguish properties as denotations of linguistic predicates (abundant properties or non-natural properties) from properties that play a role in (fundamental) reality (sparse properties or natural properties). I will argue that the ontology reflected in natural language (the subject matter of naïve metaphysics (Fine2017) or natural language ontology) displays yet another notion of a property distinct from the notion of an abundant property. This notion roughly corresponds to the notion of a Kimian or abstract state that some linguists (Maienborn, Moltmann) have argued is involved as implicit arguments of (most) stative verbs. I will furthermore argue that this notion is part of a universal ontology of natural language as it can hardly have been learned by exposure to experience or imported from philosophy.

The relevant notion of a property is that conveyed by explicit property-referring terms, formed with the noun *property* followed by a clausal modifier (gerund in English, infinitival clause in German and French):

(1) a. the property of being wise.

b. die Eigenschaft, weise zu sein ‘the property of being wise’, la propriété d’être sage

It is a common view that any open sentence in natural language conveys an abundant property, and that gerunds and infinitival clauses refer to properties (Chierchia1984, Chierchia/Turner1988). Explicit property-referring terms then just seem pick up the property denoted by the gerundive or infinitival modifier. But this cannot be right: the construction of explicit property-referring terms is subject to considerable, so far unnoticed constraints. First, *property* does not permit eventive verbs as predicates of its clausal modifier:

(2) ??? the property of walking home / writing a book / meeting Mary

This also holds for the copula verbs *become*, as opposed to *be*:

(3) a. the property of being sick / cancer free

b. ??? the property of becoming sick / cancer free

The clausal modifier of *property* allows stative verbs of the sort below:

(4) the property of owning an apartment / owing someone money / resembling a film star / knowing a foreign language

But it excludes stative verbs that describe what Maienborn (2007) calls ‘Kimean states’ or what Moltmann (2015) calls ‘abstract states’, in contrast to ‘Davidsonian states’ (Maienborn) or ‘concrete states’ (Moltmann), such as states of bodily positions:

(5) ??? the property of sleeping / standing / sitting / kneeling

Concrete state verbs are distinguished semantically from abstract state verbs, for example, by allowing spatial modifiers and manner modifiers (Maienborn 2007). This follows if abstract state verbs take states as Davidsonian arguments that lack a spatial location and a particular manifestation. Abstract states in that sense are also implicit Davidsonian arguments of the copula verbs *be* and *have*, which are always acceptable as predicates of clausal modifiers of *property*, by whatever adjectival or nominal predicate they may be followed:

(6) the property of being a player at the game / having wisdom / having solved an important mathematical problem

The contrast with eventive verbs that seem to describe the same ongoing is particularly remarkable:

(7) a. the property of being the cause of a commotion

b. ??? the property of causing a commotion

(8) a. the property of being asleep

b. \* the property of sleeping

(9) a. la propriété d'être debout

b. \* the property of standing

Thus the noun *property* thus is subject to the following constraint:

(10) The Abstract-State Constraint

The clausal modifier of *property* must describe abstract states.

A look at various European languages suggests that the constraint may be universal. It is furthermore implausible that the constraint is learned by exposure to uses of explicit property-referring terms (and of course it could not possibly have been 'imported' from philosophy). This then suggests that the notion of a property as an abstract, predicable state is part of a universal ontological inventory that is best considered part of universal grammar in the Chomskyan sense.

### **(Some) References**

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